



CLEVELAND-CLIFFS INC.
Hibbing Taconite Company
4950 County Highway 5 North, Hibbing, MN 55746
P 218.252.5950 clevelandcliffs.com

January 19, 2022

Regional Administrator
Air and Radiation Division
C/O Kathleen D'Agostino
US EPA, Region 5 (A-18J)
77 West Jackson Boulevard
Chicago, IL 60604
dagostino.kathleen@epa.gov

**Re: Hibbing Taconite Company
Semiannual Compliance Report
40 CFR 53.1235(e)(5) Regional Haze Compliance Report
Report Period: July 1, 2021- December 31, 2021**

To Whom it May Concern:

Hibbing Taconite Company (HTC) is subject to the *Revision to 2013 Taconite Federal Implementation Plan Establishing BART for Taconite Plants* (FIP) of 40 CFR 52.1235 as published in the Federal Register on April 12, 2016. The final rule came into effect on May 12, 2016. Per this rule, HTC is required to submit a compliance report on a semiannual basis. The potential deviations and downtime noted herein are not necessarily violations of the applicable requirements. The facility preserves the right to use credible evidence to demonstrate compliance with all applicable requirements applicable during this reporting period. Appendix A contains a complete list of the process units, control devices, and CEMS covered by the compliance report. Appendix B is the Semiannual Compliance Report.

Indurating Line and Control Equipment Reporting

HTC operates three indurating furnaces - Furnace Line 1 (EU020), Furnace Line 2 (EU021), and Furnace Line 3 (EU022). During the reporting period, HTC did not have an emission limit in effect for NO_x. The emission limit of 347.4 lbs of SO₂/hr became effective on April 11, 2018. Each furnace line is controlled by four wet scrubbers. These scrubbers control particulate emissions from the furnace lines and are also considered low efficiency SO₂ control. During the reporting period there were no SSM events related to the process scrubbers. Furnace startup, shutdown, and malfunction events for this reporting period are listed within this report.

CEMS Reporting

Monitor downtime or malfunctions within the applicable reporting period have been submitted in HTC's Quarterly Excess Emissions and Monitoring System Report. All actions taken within this report were consistent with HTC's SSM plan.

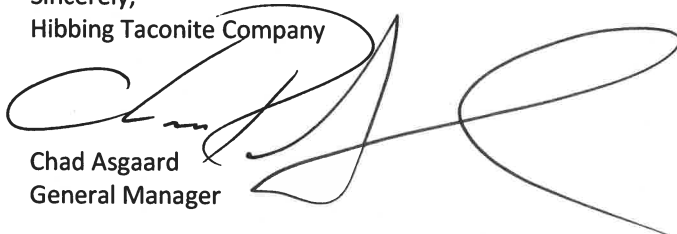
Recordkeeping and Reporting Requirements

Recordkeeping and reporting deviations during the applicable reporting period are listed in the attached report. During this reporting period, there were no deviations from the recordkeeping and reporting requirements.

Certification

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Sincerely,
Hibbing Taconite Company

A handwritten signature in black ink, appearing to read 'Chad Asgaard', is written over the printed name and title.

Chad Asgaard
General Manager

Cc: Tasha Niemi (Hibbing Taconite Company)
Jason Aagnes (Cleveland Cliffs)

Semiannual Compliance Report - Federal Implementation Plan for Regional Haze
 Required by 40 CFR 52.1235(e)(5)

Reporting Period: July 1 - December 31, 2021

Company: Hibbing Taconite Company
 4950 County Highway 5 North
 PO Box 589
 Hibbing, MN 55746-0589

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU22	Furnace Indurating Line 3	7/1/2021 0:07	7/1/2021 1:22	75	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	7/1/2021 6:49	7/1/2021 7:04	15	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	7/2/2021 11:01	7/2/2021 12:04	63	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/2/2021 16:41	7/2/2021 16:43	2	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/2/2021 16:59	7/2/2021 17:00	1	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment

Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU20	Furnace Indurating Line 1	7/2/2021 17:26	7/2/2021 17:51	25	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	7/5/2021 10:11	7/6/2021 6:20	1209	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/7/2021 8:00	7/7/2021 8:01	1	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	7/7/2021 8:11	7/8/2021 11:29	1638	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	7/10/2021 17:44	7/10/2021 18:39	55	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	7/11/2021 8:37	7/11/2021 14:23	346	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/11/2021 21:56	7/11/2021 22:16	20	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	7/11/2021 21:56	7/11/2021 22:17	21	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment

Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU22	Furnace Indurating Line 3	7/12/2021 1:21	7/12/2021 12:24	663	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	7/12/2021 14:13	7/12/2021 15:05	52	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/12/2021 16:36	7/12/2021 18:02	86	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	7/12/2021 16:36	7/12/2021 18:05	89	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	7/14/2021 6:59	7/14/2021 7:24	25	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	7/14/2021 7:30	7/14/2021 7:56	26	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	7/14/2021 8:08	7/14/2021 9:08	60	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/14/2021 8:47	7/14/2021 9:04	17	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU21	Furnace Indurating Line 2	7/14/2021 10:03	7/14/2021 10:51	48	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	7/14/2021 14:14	7/14/2021 15:53	99	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	7/14/2021 19:17	7/14/2021 19:19	2	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	7/14/2021 22:08	7/14/2021 22:10	2	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	7/14/2021 22:17	7/14/2021 22:18	1	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	7/15/2021 21:01	7/15/2021 21:18	17	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	7/16/2021 9:01	7/16/2021 14:03	302	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/19/2021 9:37	7/19/2021 9:41	4	Electrical Outage	After electrical outage, furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment

Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU20	Furnace Indurating Line 1	7/19/2021 9:55	7/19/2021 9:56	1	Electrical Outage	After electrical outage, furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	7/20/2021 1:29	7/20/2021 2:03	34	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	7/20/2021 9:51	7/20/2021 10:23	32	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/21/2021 6:44	7/21/2021 6:56	12	Planned Shutdown	Planned shutdown of line. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	7/21/2021 6:45	7/21/2021 7:00	15	Planned Shutdown	Planned shutdown of line. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	7/21/2021 8:14	7/21/2021 10:35	141	Planned Shutdown	Planned shutdown of line. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	7/21/2021 12:51	7/21/2021 16:04	193	Planned Shutdown	Planned shutdown of line. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	7/21/2021 12:54	7/21/2021 14:04	70	Electrical Outage	After electrical outage, furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/21/2021 13:58	7/21/2021 16:12	134	Planned Shutdown	Planned shutdown of line. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment

Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU21	Furnace Indurating Line 2	7/21/2021 16:09	7/21/2021 16:25	16	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/22/2021 20:04	7/22/2021 20:23	19	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/22/2021 20:37	7/22/2021 20:38	1	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/24/2021 21:07	7/24/2021 21:10	3	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	7/25/2021 7:26	7/25/2021 7:50	24	Planned Shutdown	Planned shutdown of line. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/28/2021 6:28	7/28/2021 7:54	86	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/28/2021 20:18	7/28/2021 20:39	21	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	7/29/2021 10:18	7/29/2021 10:58	40	Downstream Equipment Issues	Equipment issues downstream of furnace were repaired, furnace brought back to normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	7/29/2021 10:56	7/29/2021 11:51	55	Downstream Equipment Issues	Equipment issues downstream of furnace were repaired, furnace brought back to normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU20	Furnace Indurating Line 1	7/29/2021 15:48	7/29/2021 15:58	10	Downstream Equipment Issues	Equipment issues downstream of furnace were repaired, furnace brought back to normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	7/31/2021 2:37	7/31/2021 19:55	1038	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	8/1/2021 17:09	8/1/2021 17:26	17	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	8/6/2021 12:02	8/8/2021 15:22	3080	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	8/10/2021 7:25	8/10/2021 8:06	41	Lack of Hearth Layer	Lack of hearth layer to the furnace line. Brought back up to normal operating condition when hearth was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	8/10/2021 10:31	8/10/2021 11:34	63	Lack of Hearth Layer	Lack of hearth layer to the furnace line. Brought back up to normal operating condition when hearth was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	8/10/2021 19:21	8/10/2021 19:28	7	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	8/11/2021 8:01	8/11/2021 8:06	5	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment

Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU22	Furnace Indurating Line 3	8/12/2021 21:10	8/12/2021 21:24	14	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	8/13/2021 0:46	8/13/2021 1:43	57	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	8/16/2021 0:06	8/16/2021 0:15	9	Electrical Outage	After electrical outage, furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	8/16/2021 2:37	8/16/2021 4:26	109	Computer Issues	The computer system was repaired and the furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	8/16/2021 5:52	8/16/2021 6:11	19	Electrical Outage	After electrical outage, furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	8/16/2021 7:54	8/16/2021 8:03	9	Electrical Outage	After electrical outage, furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	8/16/2021 8:14	8/16/2021 9:32	78	Electrical Outage	After electrical outage, furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	8/17/2021 1:08	8/17/2021 1:22	14	Electrical Outage	After electrical outage, furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	8/17/2021 1:24	8/17/2021 1:45	21	Electrical Outage	After electrical outage, furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment

Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU21	Furnace Indurating Line 2	8/19/2021 15:17	8/20/2021 11:33	1216	Electrical Outage	After electrical outage, furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	8/19/2021 16:34	8/20/2021 7:36	902	Electrical Outage	After electrical outage, furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	8/20/2021 20:24	8/20/2021 20:42	18	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	8/21/2021 1:08	8/21/2021 1:31	23	Electrical Outage	After electrical outage, furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	8/21/2021 1:50	8/21/2021 3:20	90	Electrical Outage	After electrical outage, furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	8/21/2021 4:12	8/21/2021 8:53	281	Electrical Outage	After electrical outage, furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	8/21/2021 5:38	8/21/2021 7:58	140	Lack of Hearth Layer	Lack of hearth layer to the furnace line. Brought back up to normal operating condition when hearth was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	8/21/2021 14:51	8/22/2021 6:43	962	Electrical Outage	After electrical outage, furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	8/22/2021 12:10	8/22/2021 12:31	21	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment

Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU20	Furnace Indurating Line 1	8/22/2021 18:45	8/22/2021 19:17	32	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	8/22/2021 18:46	8/22/2021 19:20	34	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	8/23/2021 15:45	8/23/2021 18:55	190	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	8/28/2021 16:43	8/28/2021 17:11	28	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	8/28/2021 16:44	8/28/2021 17:28	44	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	8/29/2021 3:46	8/29/2021 4:11	25	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	8/29/2021 4:24	8/29/2021 4:47	23	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment

Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU22	Furnace Indurating Line 3	8/30/2021 1:00	8/30/2021 1:11	11	Computer Issues	The computer system was repaired and the furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	8/30/2021 4:01	8/30/2021 4:15	14	Computer Issues	The computer system was repaired and the furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	9/2/2021 14:39	9/2/2021 14:52	13	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	9/4/2021 15:33	9/4/2021 15:43	10	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	9/5/2021 19:20	9/5/2021 19:35	15	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	9/6/2021 13:34	9/6/2021 13:35	1	Computer Issues	The computer system was repaired and the furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	9/6/2021 18:27	9/6/2021 21:20	173	Computer Issues	The computer system was repaired and the furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/6/2021 18:41	9/6/2021 21:03	142	Computer Issues	The computer system was repaired and the furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment

Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU20	Furnace Indurating Line 1	9/7/2021 2:57	9/7/2021 3:49	52	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	9/7/2021 3:02	9/7/2021 3:33	31	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/7/2021 5:47	9/7/2021 6:11	24	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	9/7/2021 5:48	9/7/2021 6:10	22	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	9/7/2021 7:24	9/7/2021 13:06	342	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/7/2021 13:16	9/7/2021 14:54	98	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	9/7/2021 13:42	9/7/2021 13:47	5	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU20	Furnace Indurating Line 1	9/7/2021 15:17	9/7/2021 15:23	6	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	9/9/2021 8:03	9/9/2021 23:48	945	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/9/2021 10:50	9/9/2021 11:18	28	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/9/2021 13:55	9/9/2021 13:58	3	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	9/9/2021 13:55	9/9/2021 14:31	36	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	9/13/2021 4:54	9/13/2021 7:11	137	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/13/2021 4:55	9/13/2021 5:03	8	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/13/2021 10:02	9/13/2021 10:12	10	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU21	Furnace Indurating Line 2	9/13/2021 12:30	9/13/2021 14:23	113	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/14/2021 4:48	9/14/2021 5:05	17	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	9/14/2021 5:00	9/15/2021 7:29	1589	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	9/14/2021 5:02	9/16/2021 1:07	2645	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/14/2021 6:05	9/15/2021 7:30	1525	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	9/15/2021 14:02	9/15/2021 23:28	566	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/15/2021 14:30	9/15/2021 22:25	475	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	9/16/2021 4:36	9/16/2021 4:41	5	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	9/17/2021 20:47	9/17/2021 21:02	15	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU20	Furnace Indurating Line 1	9/17/2021 22:21	9/17/2021 22:46	25	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	9/17/2021 23:37	9/17/2021 23:42	5	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	9/17/2021 23:53	9/18/2021 0:01	8	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	9/18/2021 4:06	9/18/2021 4:09	3	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	9/18/2021 4:20	9/18/2021 4:27	7	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/20/2021 1:25	9/20/2021 2:59	94	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/20/2021 3:15	9/20/2021 3:27	12	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	9/20/2021 12:14	9/20/2021 12:37	23	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	9/21/2021 12:21	9/21/2021 12:44	23	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment

Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU20	Furnace Indurating Line 1	9/23/2021 2:12	9/23/2021 2:44	32	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/23/2021 10:57	9/23/2021 11:33	36	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	9/25/2021 7:30	9/25/2021 13:20	350	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	9/25/2021 7:56	9/25/2021 14:27	391	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/25/2021 8:57	9/25/2021 9:14	17	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/25/2021 14:20	9/25/2021 16:36	136	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	9/29/2021 7:44	9/29/2021 7:46	2	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/2/2021 23:48	10/2/2021 23:51	3	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU21	Furnace Indurating Line 2	10/3/2021 1:59	10/3/2021 2:01	2	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/3/2021 2:06	10/3/2021 2:27	21	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	10/3/2021 14:42	10/3/2021 15:14	32	Computer Issues	The computer system was repaired and the furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/3/2021 14:57	10/3/2021 15:17	20	Computer Issues	The computer system was repaired and the furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	10/3/2021 19:41	10/3/2021 19:44	3	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	10/4/2021 7:46	10/4/2021 8:04	18	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/4/2021 7:46	10/4/2021 8:25	39	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/4/2021 9:51	10/4/2021 10:22	31	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment

Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU21	Furnace Indurating Line 2	10/5/2021 0:27	10/5/2021 0:36	9	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	10/5/2021 10:08	10/5/2021 10:32	24	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	10/5/2021 12:31	10/5/2021 12:36	5	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/7/2021 10:42	10/8/2021 1:35	893	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	10/10/2021 0:18	10/10/2021 0:26	8	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	10/12/2021 14:36	10/12/2021 14:59	23	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	10/14/2021 13:35	10/14/2021 13:56	21	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/14/2021 13:39	10/14/2021 13:51	12	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment

Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU20	Furnace Indurating Line 1	10/14/2021 16:04	10/14/2021 16:08	4	Computer Issues	The computer system was repaired and the furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/14/2021 16:04	10/14/2021 16:05	1	Computer Issues	The computer system was repaired and the furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/15/2021 7:47	10/15/2021 7:56	9	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	10/17/2021 2:59	10/17/2021 3:32	33	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/17/2021 2:59	10/17/2021 3:38	39	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/18/2021 13:56	10/18/2021 14:33	37	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	10/21/2021 20:03	10/21/2021 20:30	27	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/21/2021 20:03	10/21/2021 20:17	14	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment

Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU22	Furnace Indurating Line 3	10/22/2021 11:31	10/24/2021 16:12	3161	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	10/22/2021 16:01	10/22/2021 16:04	3	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	10/22/2021 16:27	10/22/2021 16:50	23	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/25/2021 10:13	10/25/2021 11:15	62	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/25/2021 11:57	10/25/2021 14:35	158	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/25/2021 20:08	10/25/2021 20:16	8	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/25/2021 20:32	10/25/2021 20:36	4	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/26/2021 9:27	10/26/2021 10:03	36	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment

Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU22	Furnace Indurating Line 3	10/27/2021 1:39	10/27/2021 1:48	9	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	10/27/2021 11:48	10/27/2021 12:33	45	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	10/28/2021 15:11	10/28/2021 15:22	11	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	10/29/2021 10:45	10/29/2021 10:57	12	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/29/2021 10:45	10/29/2021 11:15	30	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	10/30/2021 3:01	10/30/2021 5:14	133	Computer Issues	The computer system was repaired and the furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/30/2021 16:08	10/30/2021 16:11	3	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	10/30/2021 18:56	10/30/2021 19:28	32	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU20	Furnace Indurating Line 1	10/30/2021 18:57	10/30/2021 19:26	29	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	10/30/2021 23:51	10/30/2021 23:54	3	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	10/31/2021 0:35	10/31/2021 0:55	20	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	11/1/2021 7:30	11/1/2021 7:39	9	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	11/1/2021 7:54	11/1/2021 7:56	2	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	11/1/2021 12:48	11/1/2021 13:05	17	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	11/3/2021 3:11	11/3/2021 3:41	30	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	11/3/2021 20:20	11/3/2021 20:29	9	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	11/4/2021 8:06	11/4/2021 8:18	12	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU20	Furnace Indurating Line 1	11/5/2021 14:10	11/5/2021 14:37	27	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	11/11/2021 7:35	11/11/2021 7:41	6	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	11/12/2021 21:52	11/12/2021 22:14	22	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	11/12/2021 23:21	11/13/2021 0:25	64	Lack of Hearth Layer	Lack of hearth layer to the furnace line. Brought back up to normal operating condition when hearth was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	11/15/2021 0:37	11/15/2021 0:51	14	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	11/16/2021 3:26	11/16/2021 3:56	30	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	11/16/2021 9:30	11/16/2021 9:33	3	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	11/16/2021 9:36	11/16/2021 14:06	270	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment

Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU22	Furnace Indurating Line 3	11/16/2021 10:36	11/16/2021 14:05	209	Downstream Equipment Issues	Equipment issues downstream of furnace were repaired, furnace brought back to normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	11/16/2021 19:30	11/16/2021 19:31	1	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	11/17/2021 14:14	11/18/2021 5:17	903	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	11/17/2021 21:46	11/17/2021 22:07	21	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	11/18/2021 18:18	11/18/2021 18:41	23	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	11/18/2021 18:18	11/18/2021 18:52	34	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	11/19/2021 10:18	11/19/2021 15:17	299	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	11/19/2021 13:31	11/19/2021 21:28	477	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment

Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU21	Furnace Indurating Line 2	11/19/2021 15:09	11/19/2021 23:04	475	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	11/22/2021 2:27	11/22/2021 2:28	1	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	11/22/2021 2:42	11/22/2021 2:57	15	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	11/23/2021 9:19	11/23/2021 9:38	19	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	11/23/2021 9:30	11/23/2021 9:44	14	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	11/27/2021 3:28	11/27/2021 3:45	17	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	11/30/2021 12:19	11/30/2021 13:31	72	Electrical Outage	After electrical outage, furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	11/30/2021 14:57	11/30/2021 15:35	38	Electrical Outage	After electrical outage, furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	11/30/2021 20:40	11/30/2021 20:43	3	Electrical Outage	After electrical outage, furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU21	Furnace Indurating Line 2	12/4/2021 6:53	12/4/2021 8:30	97	Electrical Outage	After electrical outage, furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/6/2021 0:58	12/6/2021 2:58	120	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	12/9/2021 4:41	12/9/2021 7:15	154	Downstream Equipment Issues	Equipment issues downstream of furnace were repaired, furnace brought back to normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/9/2021 4:41	12/9/2021 5:02	21	Downstream Equipment Issues	Equipment issues downstream of furnace were repaired, furnace brought back to normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/9/2021 6:15	12/9/2021 6:20	5	Downstream Equipment Issues	Equipment issues downstream of furnace were repaired, furnace brought back to normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/9/2021 7:11	12/9/2021 8:08	57	Downstream Equipment Issues	Equipment issues downstream of furnace were repaired, furnace brought back to normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/9/2021 13:55	12/12/2021 12:02	4207	Planned Maintenance	Planned maintenance occurred. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	12/11/2021 8:08	12/11/2021 8:11	3	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU20	Furnace Indurating Line 1	12/12/2021 12:23	12/12/2021 12:29	6	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/12/2021 12:47	12/12/2021 12:50	3	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/12/2021 21:46	12/12/2021 22:09	23	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	12/14/2021 1:06	12/14/2021 1:15	9	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	12/14/2021 18:23	12/14/2021 18:45	22	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/14/2021 18:24	12/14/2021 18:42	18	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	12/15/2021 6:27	12/15/2021 6:30	3	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	12/15/2021 12:42	12/15/2021 12:52	10	Downstream Equipment Issues	Equipment issues downstream of furnace were repaired, furnace brought back to normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment

Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU21	Furnace Indurating Line 2	12/15/2021 13:28	12/15/2021 14:32	64	Downstream Equipment Issues	Equipment issues downstream of furnace were repaired, furnace brought back to normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/15/2021 13:35	12/15/2021 14:03	28	Downstream Equipment Issues	Equipment issues downstream of furnace were repaired, furnace brought back to normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/16/2021 4:36	12/16/2021 6:20	104	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	12/16/2021 4:38	12/16/2021 6:25	107	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/17/2021 8:40	12/17/2021 8:53	13	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/17/2021 13:48	12/17/2021 15:07	79	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	12/17/2021 13:48	12/17/2021 14:54	66	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	12/17/2021 14:57	12/17/2021 16:37	100	Lack of Hearth Layer	Lack of hearth layer to the furnace line. Brought back up to normal operating condition when hearth was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment

Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU22	Furnace Indurating Line 3	12/17/2021 15:50	12/17/2021 15:55	5	Lack of Hearth Layer	Lack of hearth layer to the furnace line. Brought back up to normal operating condition when hearth was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/17/2021 15:51	12/17/2021 15:59	8	Lack of Hearth Layer	Lack of hearth layer to the furnace line. Brought back up to normal operating condition when hearth was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/17/2021 15:58	12/17/2021 16:54	56	Lack of Hearth Layer	Lack of hearth layer to the furnace line. Brought back up to normal operating condition when hearth was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/17/2021 16:02	12/17/2021 16:08	6	Lack of Hearth Layer	Lack of hearth layer to the furnace line. Brought back up to normal operating condition when hearth was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/19/2021 4:13	12/19/2021 4:38	25	Electrical Outage	After electrical outage, furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/22/2021 10:55	12/22/2021 10:56	1	Computer Issues	The computer system was repaired and the furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	12/23/2021 1:29	12/23/2021 1:49	20	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/23/2021 1:30	12/23/2021 1:57	27	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment

Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU20	Furnace Indurating Line 1	12/23/2021 19:36	12/23/2021 19:59	23	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/25/2021 7:02	12/25/2021 16:31	569	Lack of Hearth Layer	Lack of hearth layer to the furnace line. Brought back up to normal operating condition when hearth was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/25/2021 7:03	12/25/2021 7:47	44	Lack of Hearth Layer	Lack of hearth layer to the furnace line. Brought back up to normal operating condition when hearth was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	12/25/2021 7:03	12/25/2021 7:54	51	Lack of Hearth Layer	Lack of hearth layer to the furnace line. Brought back up to normal operating condition when hearth was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/25/2021 8:26	12/25/2021 12:26	240	Lack of Hearth Layer	Lack of hearth layer to the furnace line. Brought back up to normal operating condition when hearth was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	12/25/2021 12:07	12/25/2021 14:54	167	Lack of Hearth Layer	Lack of hearth layer to the furnace line. Brought back up to normal operating condition when hearth was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/28/2021 0:19	12/28/2021 1:10	51	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/28/2021 2:15	12/28/2021 2:40	25	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment

Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU20	Furnace Indurating Line 1	12/28/2021 3:32	12/28/2021 3:33	1	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/28/2021 10:03	12/28/2021 10:11	8	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/28/2021 19:01	12/28/2021 19:15	14	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU21	Furnace Indurating Line 2	12/29/2021 8:18	12/29/2021 8:31	13	Lack of Feed	Lack of feed to the furnace line. Brought back up to normal operating condition when feed was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/29/2021 19:33	12/29/2021 22:59	206	Computer Issues	The computer system was repaired and the furnace was brought back up to normal operation. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/30/2021 1:41	12/30/2021 1:50	9	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/30/2021 7:26	12/30/2021 8:19	53	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/30/2021 14:35	12/30/2021 14:36	1	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Periods of Startup, Shutdown, or Malfunction of Process Unit and Control Equipment						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Minutes):	Cause:	Corrective Action:
EU22	Furnace Indurating Line 3	12/30/2021 15:09	12/30/2021 15:16	7	Lack of Hearth Layer	Lack of hearth layer to the furnace line. Brought back up to normal operating condition when hearth was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU20	Furnace Indurating Line 1	12/30/2021 15:29	12/30/2021 15:38	9	Lack of Hearth Layer	Lack of hearth layer to the furnace line. Brought back up to normal operating condition when hearth was available. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.
EU22	Furnace Indurating Line 3	12/31/2021 8:43	12/31/2021 8:53	10	Furnace Malfunction	Furnace was repaired and brought back into normal operating condition. Followed SSM Plan to minimize emissions. Hibbing Taconite has no reason to believe any emission exceedances occurred during this period.

Semiannual Compliance Report - Federal Implementation Plan for Regional Haze
Required by 40 CFR 52.1235(e)(5)

Reporting Period: July 1 - December 31, 2021

Company: Hibbing Taconite Company
4950 County Highway 5 North
PO Box 589
Hibbing, MN 55746-0589

Periods of Excess Emissions of NO _x and SO ₂						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Days):	Cause:	Corrective Action:
No excess emissions for SO ₂ during this reporting period. NO _x limit not yet effective.						

Semiannual Compliance Report - Federal Implementation Plan for Regional Haze
 Required by 40 CFR 52.1235(e)(5)

Reporting Period: July 1 - December 31, 2021

Company: Hibbing Taconite Company
 4950 County Highway 5 North
 PO Box 589
 Hibbing, MN 55746-0589

Description of Monitor Downtime						
Process Unit/Stack Vent:	Analyzer Analyte:	Analyzer Serial Number:	Event Start Time:	Event End Time:	Duration (Hours):	Cause:
Please refer to the Regional Haze Excess Emissions Reports.						
						Corrective Action:

Required by 40 CFR 52.1235(e)(5)

Reporting Period: July 1 - December 31, 2021

Company: **Hibbing Taconite Company**

4950 County Highway 5 North

PO Box 589

Hibbing, MN 55746-0589

Recordkeeping & Reporting Deviations						
Unit ID:	Unit Description:	Event Start Time:	Event End Time:	Duration (Days):	40 CFR 52.1235 Requirement:	Cause & Corrective Action:
		No deviations from the requirements of 52.1235 in regards to recordkeeping and reporting during the reporting period.				